



#8/3
7/24/01
G. F. F. F.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Pittenger, et al.

Serial No.: 09/319,521

Filed: June 4, 1999

For: Improved Chondrogenic Differentiation of
Human Mesenchymal Stem Cells

Group: 1644

Examiner: Tung

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Commissioner of Patents and Trademarks
Washington, D.C. 20231

AMENDMENT

SIR:

In response to the Office Action dated January 17, 2001,
kindly amend the above-identified application as follows:

IN THE CLAIMS:

Cancel Claims 14-16, 18-27, 29-35, 37, 38, 40, and 41
without prejudice and add the following claims:

42. A process for producing chondrocytes from mesenchymal
stem cells by culturing mesenchymal stem cells in a chemically
defined serum-free medium *in vitro* wherein the mesenchymal stem
cells are associated in a three-dimensional format, and wherein
said chemically defined serum-free medium comprises (1) a
chemically defined minimum essential medium; (2) ascorbate or an
analog thereof; (3) an iron source; (4) insulin or an insulin-